

## REMARKS

Claims 36 and 38-51 are pending in the application. Claims 36 and 38 to 47 have been previously allowed. Claim 48 is being amended in this Response. No new matter has been added by this amendment. An Information Disclosure Statement is submitted herein pursuant to 37 C.F.R. § 1.114. Checks in the amount of \$750 is submitted herewith to cover the cost of the Request for Continued Examination. Please charge Deposit Account No. 02-1818 for any fees owed.

In the Final Office Action, Claims 48 and 51 were rejected under 35 U.S.C. § 102(b, e or f) as being anticipated by the admitted prior art ("APA") of Fig. 1 and page 2. Claims 49 and 50 were rejected under 35 U.S.C. § 103(a) over the APA in view of U.S. Patent No. 5,757,263 to Ravindranathan ("*Ravindranathan*"), U.S. Patent No. 5,527,443 to Chan ("*Chan*") or U.S. Patent No. 5,093,774 to Cobb ("*Cobb*").

Regarding the rejection of Claims 48 and 51 under the APA, Claim 48 as amended includes a semiconductor body that includes electrically conductive plates interleaved between zinc oxide layers, a body surface and an interior region of the body surface. The interior region has not been subjected to treatment or coating. Accordingly, the interior region of the body surface shows no effect from removal of the treatment or coating. The varistor further includes end caps formed by contacting the terminal regions but not the interior region with a nickel plating solution to form a desirably thick nickel barrier end cap over the terminal regions but not the interior region.

The Office Action states that the previous amendment to Claim 48 made in the previous response claims no method and shows no structural differences over the APA. Applicant submits that Claim 48 as amended herein does both. First, as amended previously and currently, the varistor is made by a method of contacting the terminal portions but not the interior region of the varistor with the nickel solution. That is, the interior region is not contacted with the solution. The APA does not teach or suggest Applicant's method and indeed teaches away from this method by discussing four methods, each distinguishable from claim 48, namely, (i) plating and removing metal mechanically, (ii) covering with a photoresist mask, plating and then removing the mask, (iii) sputtering, which also requires a mask; and (iv) depositing a phosphate layer on the interior region.

Each of the four methods leaves either a coating or an effect of removing the coating. The masks are chemically etched away. The chemical removal of the masks leaves the semiconductor body chemically etched, a physical effect not found in the claimed device. Mechanically removing the plating leaves the semiconductor body mechanically etched, a physical effect not found in the device as claimed. The phosphate is a coating which remains on the device.

Moreover, claim 48 as amended is written to communicate specifically that the device has not been treated or coated to distinguish a device that is simply not currently coated or treated. The APA shows a device having an interior region that does not appear to be currently treated but describes four situations in which the device has been coated or treated. Indeed, the APA does not teach or suggest any scenario in which the device is not coated or treated and instead teaches away from such limitation. Claim 48, on the other hand, includes dipping the terminal regions but not the interior regions of the body, so as to form desired end cap terminals and to avoid: (i) having to coat the interior region and (ii) having to remove any coating therefrom.

Besides the recited method limitations, Claim 48 as amended includes structural differences over the art of record. In one instance, a structural difference is the lack of a physical effect on the semiconductor body of the removal of a coating or treatment or the lack of a coating that is not removed. The APA devices contain have mechanical effects, chemical effects or a phosphate coating. Claim 48 as amended includes therefore limitations defining structural differences as well as differences due to a method of manufacture. Accordingly, Claim 48 is novel, non-obvious and distinguished patentably over the APA.

Applicant submits that the present amendment to Claim 48 further clarifies the distinctions cited in Applicant's previous response filed October 25, 2002, which highlights Examiner's reasons for allowing Claims 36 and 38 to 47, namely, the body surface being untreated and bringing only the terminal regions into contact with the plating solution.

Regarding the rejection of Claims 49 and 50 as being obvious over the APA in view *Ravindranathan, Chan* or *Cobb*, Claims 49 and 50 each depend directly from amended Claim 48, rendering the obviousness rejection moot. For the foregoing reasons, Applicant respectfully submits that Claims 48 to 51 are patentably distinguished over the art cited herein.

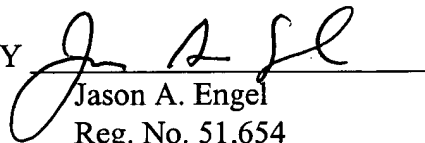
An earnest endeavor has been made to place this application in condition for formal allowance and in the absence of more pertinent art such action is courteously solicited. If the Examiner has any questions regarding the above amendment, Applicant respectfully requests that the Examiner contact the undersigned attorney.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "**Versions with Markings to Show Changes Made.**"

Respectfully submitted,

BELL, BOYD & LLOYD LLC

BY



Jason A. Engel

Reg. No. 51,654

P.O. Box 1135

Chicago, Illinois 60690-1135

Phone: (312) 807-4236

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Claims:**

Claim 48 has been amended as follows:

48. (Twice Amended) A varistor, comprising:

a semiconductor body including electrically conductive plates interleaved between zinc oxide layers, ~~an untreated~~ a body surface, an interior region of the body surface that has not been subjected to treatment or coating and does not therefore show any effect from removal of the treatment or coating, and a plurality of separate terminal regions; and

nickel barrier caps formed by ~~directly~~ contacting the ~~semiconductor~~ terminal regions but not the interior region of the semiconductor body with a nickel plating solution in order to form a desirably thick nickel barrier cap over the terminal regions of the semiconductor body without forming a nickel barrier over the interior region of the semiconductor body.